B60 Domestic Voltage Optimisation Unit

accendo

Installation Manual

V2.1 September 2014

PRODUCT ADVISORY NOTICE

This product must be installed by a competent person in accordance with the IEE Wiring Regulations, BS7671 (17th Edition or later) and current Building Regulations. Ensure the electrical supply is disconnected before installation or removing the cover of the B60 unit.

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Product Description

The single phase B60 Voltage Optimisation unit is designed for use in domestic and light commercial / retail applications.

Installed between the electricity meter and main consumer unit, the B60 offers 18 volt subtractive performance. The unit is not intended for any purpose other than that defined within this document.

Warnings

Please read and observe the following notices carefully. These warnings must be observed when installing and operating the Domestic Voltage Optimisation unit. All relevant supplies must be isolated or disconnected before commencing any work.

This product must be installed by a competent person in accordance with the IEE Wiring Regulations, BS7671 (17th Edition or later) and any relevant Building Regulations.

ELECTRICAL HAZARD

Once installed, the unit has a Live Mains Supply (230v or higher) within the enclosure. The cover must not be removed until the supply to the unit has been isolated or disconnected.

Safety Advice

The unit must be installed in a dry ventilated location, it must never be covered or have restricted ventilation.

The B60 voltage optimisation unit is rated for a maximum 14kW load.
For any information not contained within this document, please contact our technical support team on 0115 9303 628.

Introduction

The B60 is a single phase Voltage Optimisation unit.

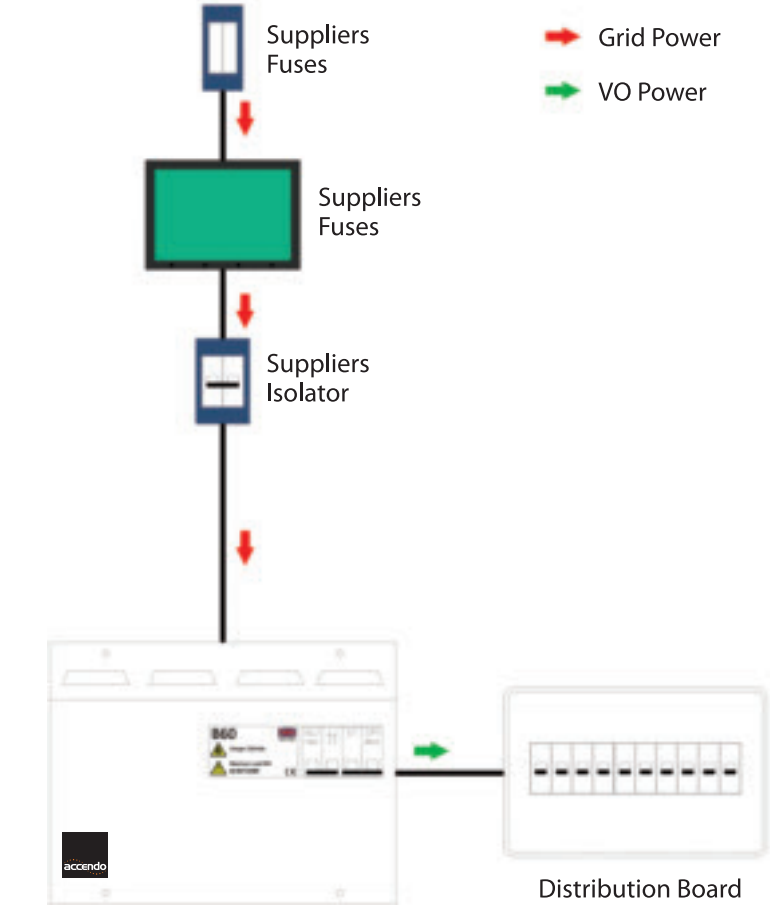
The unit reduces the incoming supply voltage by 18v (i.e.: a 240v supply would be reduced to 222v). It is designed to be connected in series with the incoming supply installed between the main electricity meter for the dwelling, and the consumer unit.

The B60 has short circuit, overload and thermal protection built in.

Rated at 14kW, the unit is suitable for the majority of domestic and light commercial / retail installations.

Connection Diagram

Typical Installation



Mounting the Accendo B60 Unit

The unit is designed to be installed between the main electricity meter and consumer unit in the most practical and accessible position available.

The installation location should be clean, dry and well ventilated. Please refer to the diagram below for the dimensions and mounting arrangements of the unit.

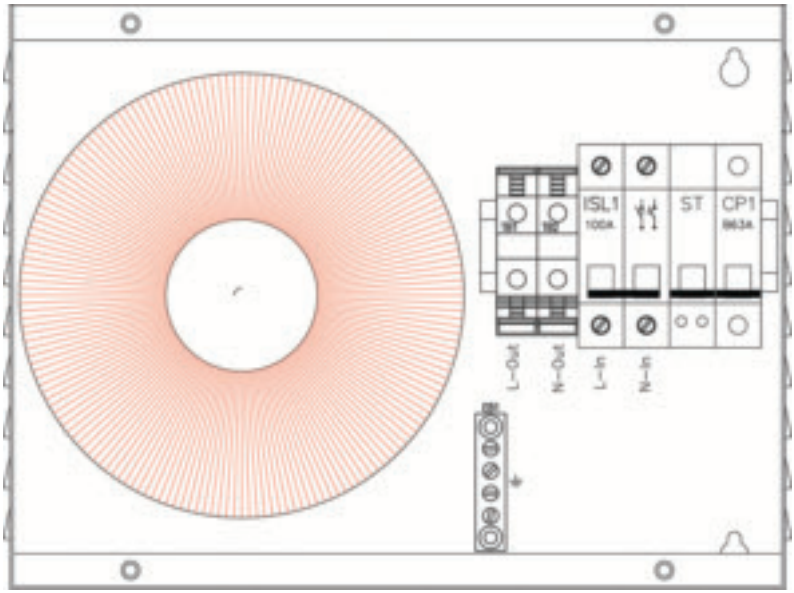
NOTE: The unit weighs approximately 10.0kgs. Always handle the unit with both hands.

Fixing Dimensions

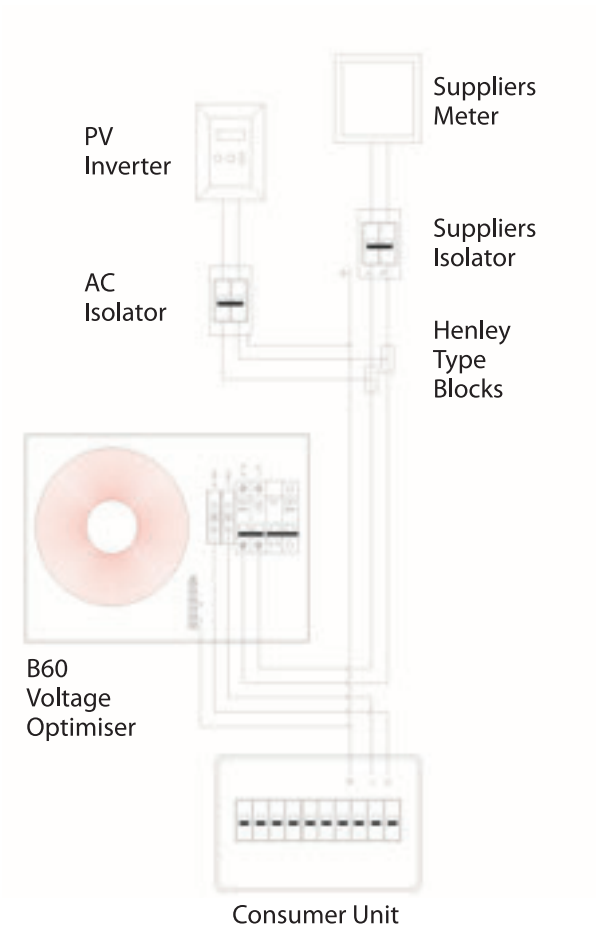
Electrical Connections

The unit is supplied with a 63 Amp miniature circuit breaker that provides overload and short circuit protection for the unit.

The transformer is fitted with an embedded thermal switch. Should the temperature of the transformer increase beyond acceptable levels the thermal switch will operate and automatically shut off the supply to the transformer by 'tripping' the incoming MCB (CP1). Once the transformer temperature has returned to an acceptable level the thermal switch will reset and the MCB can be closed. The user wiring connections are indicated in the diagrams below:



Typical Retrofit with PV



Specifications

Description	B60 Domestic Voltage Optimisation Unit
Input (Volts)	Nominal input voltage 235 – 253v, 50Hz, Single Phase AC
Output (Volts)	Nominal input voltage less 18v
Max Load	14kW
Dimensions	310mm x 235mm x 100mm
Weight	Approximately 10.0 kgs
Operating Temperature	-5°C to + 40°C
Terminal Capacity	Incoming Live = 35.0mm^2 Outgoing Live = 35.0mm^2 Incoming Neutral = 35.0mm^2 Outgoing Neutral = 35.0mm^2
Miniature Circuit Breaker	63 Amp 6kA Type B to BS EN 60898
Enclosure	Mild Steel Powder Coated
Ingress Protection	IP20
Cable Entry Facility	Bottom – 2 x 32mm
Standards	MCBs to BS EN 60898
Document Revision	v2.1 Sept 2014
Warranty	The B60 PVM Domestic Voltage Optimisation Unit is guaranteed for a period of 12 months from the date of purchase. To extend this warranty to 5 years record the serial number of the unit on the enclosed Warranty Card and return it with proof of purchase to info@accendoltd.co.uk. This warranty is limited to the replacement of faulty components only.

Warranty Card

B60 Domestic Voltage Optimisation Unit

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Model No:

Serial No:

Date of installation:

Installer Details:

Site Address:

For further information, get in touch with Accendo...

t: 0115 9303 628
e: info@accendoltd.co.uk
w: www.accendoltd.co.uk

AFFIX
STAMP

Please return this Warranty Card
along with proof of purchase to

Accendo Ltd,
Unit 19,
Soloman Road,
Ilkeston,
Derbyshire
DE7 5UA